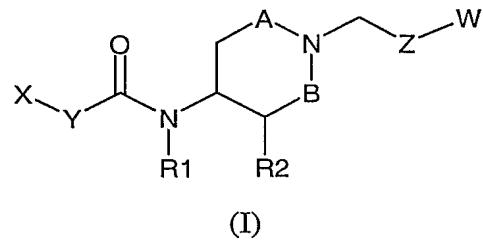


**Claims**

1. A compound of formula I



wherein X represents phenyl, naphtyl, pyrrolyl, imidazolyl, furyl, thienyl, thiazolyl, isothiazolyl, thiadiazolyl, pyrazolyl, oxazolyl, isoxazolyl, pyridyl, pyrazinyl, pyrimidinyl, pyridazinyl, quinolinyl, isoquinolyl, quinazolyl, indolyl, benzofuranyl, benzo[b]thienyl or benzimidazolyl,

wherein each X is optionally substituted by one or more of the following: cyano, halo, a C<sub>1-4</sub> alkyl group optionally substituted by one or more fluoro, a C<sub>1-4</sub> alkoxy group optionally substituted by one or more fluoro, a group CONR<sup>a</sup>R<sup>b</sup> in which R<sup>a</sup> and R<sup>b</sup> independently represent a C<sub>1-3</sub> alkyl group, phenyl, phenoxy, 2-pyridyl or 3-pyridyl, wherein the aromatic substituents (i.e. phenyl, phenoxy, 2-pyridyl or 3-pyridyl) may optionally be substituted by fluoro, chloro or cyano, or

X represents a diphenylmethyl or a dipyridinylmethyl group, optionally independently substituted at the aryl group(s) by one or more cyano, halo, trifluoromethoxy, difluoromethoxy or trifluoromethyl,

Y is OCH<sub>2</sub>, SCH<sub>2</sub> (wherein the heteroatom is connected to X), CH<sub>2</sub>CH<sub>2</sub> or CH=CH, wherein each carbon in Y is optionally substituted by 1 or 2 methyl groups and/or 1 or 2 fluoro,

R<sup>1</sup> represents H or a C<sub>1-4</sub>alkyl group,

A represents (CH<sub>2</sub>)<sub>n</sub>, wherein n is 0 or 1 and B represents (CH<sub>2</sub>)<sub>m</sub>, wherein m is 0 or 1,

R<sup>2</sup> represents H or, when A and B are identical and represents CH<sub>2</sub>, R<sub>2</sub> represents H or F,

Z represents phenyl or a heterocyclic group selected from thienyl, furyl, pyridyl, pyrazinyl, pyridazinyl, pyrrolyl, imidazolyl, thiazolyl, isothiazolyl, thiadiazolyl, pyrimidinyl, pyrazolyl, oxazolyl, isoxazolyl wherein each Z is optionally substituted by one or more of

the following: cyano, halo, a C<sub>1-4</sub> alkyl group optionally substituted by one or more fluoro, a C<sub>1-4</sub> alkoxy group optionally substituted by one or more fluoro,

W represents phenyl or a heterocyclic group selected from thienyl, furyl, pyridyl, pyrazinyl, pyridazinyl, pyrrolyl, imidazolyl, thiazolyl, isothiazolyl, thiadiazolyl,

5 pyrimidinyl, pyrazolyl, oxazolyl, isoxazolyl wherein each W is optionally substituted by one or more of the following: cyano, halo, a C<sub>1-4</sub> alkyl group optionally substituted by one or more fluoro, a C<sub>1-4</sub> alkoxy group optionally substituted by one or more fluoro, or W is optionally substituted with a trifluoromethylsulfonyl or a 2,2-difluoro-1,3-dioxolane ring (fused with two adjacent aromatic carbon atoms in W), as well as tautomers, optical

10 isomers and racemates thereof as well as pharmaceutically acceptable salts thereof, with the proviso that 2-(4-chlorophenoxy)-N-{1-[4-(1,2,3-thiadiazol-4-yl)benzyl]piperidin-4-yl}acetamide is excluded.

2. A compound according to claim 1, in which X represents a phenyl or pyridyl group  
15 substituted with one or more cyano, fluoro, chloro, trifluoromethoxy, difluoromethoxy or trifluoromethyl, or X represents a diphenylmethyl or a dipyridinylmethyl group, optionally substituted at the aryl group(s) by one or more cyano, fluoro, chloro, trifluoromethoxy, difluoromethoxy or trifluoromethyl,

Y is OCH<sub>2</sub> or SCH<sub>2</sub> (both in which the heteroatom is connected to X), CH<sub>2</sub>CH<sub>2</sub> or  
20 CH=CH,

R<sup>1</sup> is hydrogen or methyl

A represents (CH<sub>2</sub>)<sub>n</sub>, wherein n is 0 or 1 and B represents (CH<sub>2</sub>)<sub>m</sub>, wherein m is 0 or 1,

R<sup>2</sup> represents H or, when A and B are identical and represents CH<sub>2</sub>, R<sub>2</sub> represents H or F,

Z is phenyl or a heterocyclic group selected from thienyl, furyl, pyrrolyl wherein each Z is  
25 optionally substituted by cyano, fluoro, chloro or trifluoromethyl,

W represents phenyl or a heterocyclic group selected from thienyl, furyl, pyridyl, pyrazinyl, pyridazinyl, pyrrolyl, imidazolyl, thiazolyl, isothiazolyl, thiadiazolyl, pyrimidinyl, pyrazolyl, oxazolyl, isoxazolyl wherein each W is optionally substituted by one or more of the following: cyano, fluoro, chloro, trifluoromethoxy, difluoromethoxy or trifluoromethyl, or with one trifluoromethylsulfonyl or one 2,2-difluoro-1,3-dioxolane ring (fused with two adjacent aromatic carbon atoms in W),  
30 as well as pharmaceutically acceptable salts, thereof.

3. A compound according to claim 1 or claim 2, wherein X represents naphthyl or a heteroaryl ring selected from quinolinyl, isoquinolyl, quinazolyl, indolyl, benzofuranyl, benzo[*b*]thienyl, or benzimidazolyl,

5       wherein each X is optionally substituted by one or more of the following: cyano, halo, a C<sub>1-4</sub> alkyl group optionally substituted by one or more fluoro, a C<sub>1-4</sub> alkoxy group optionally substituted by one or more fluoro, or a group CONR<sup>a</sup>R<sup>b</sup> in which R<sup>a</sup> and R<sup>b</sup> independently represent a C<sub>1-3</sub> alkyl group,

Y is OCH<sub>2</sub> or SCH<sub>2</sub> (wherein the heteroatom is connected to X), CH<sub>2</sub>CH<sub>2</sub> or CH=CH,

10     R<sup>1</sup> is hydrogen or methyl,

A represents (CH<sub>2</sub>)<sub>n</sub>, wherein n is 0 or 1 and B represents (CH<sub>2</sub>)<sub>m</sub>, wherein m is 0 or 1,

R<sup>2</sup> represents H or, when A and B are identical and represents CH<sub>2</sub>, R<sub>2</sub> represents H or F;

Z is phenyl or a heterocyclic group selected from thienyl, furyl, pyrrolyl wherein each Z is optionally substituted by cyano, fluoro, chloro or trifluoromethyl,

15     W represents phenyl or a heterocyclic group selected from thienyl, furyl, pyridyl, pyrazinyl, pyridazinyl, pyrrolyl, imidazolyl, thiazolyl, isothiazolyl, thiadiazolyl, pyrimidinyl, pyrazolyl, oxazolyl, isoxazolyl wherein each W is optionally substituted by one or more of the following: cyano, fluoro, chloro, trifluoromethoxy, difluoromethoxy or trifluoromethyl, or with one trifluoromethylsulfonyl or one 2,2-difluoro-1,3-dioxolane ring (fused with two adjacent aromatic carbon atoms in W),

20     as well as pharmaceutically acceptable salts, thereof.

4. A compound according to any of the preceding claims, wherein X represents a phenyl or pyridyl group optionally substituted by one or more halogen and is further substituted by a phenyl, phenoxy, 2-pyridyl or 3-pyridyl group, wherein the substituents (*i.e.* phenyl, phenoxy, 2-pyridyl or 3-pyridyl) may optionally be further substituted by one or more fluoro, chloro or cyano

Y is OCH<sub>2</sub> or SCH<sub>2</sub> (wherein the heteroatom is connected to X), CH<sub>2</sub>CH<sub>2</sub> or CH=CH,

R<sup>1</sup> is hydrogen or methyl,

30     A represents (CH<sub>2</sub>)<sub>n</sub>, wherein n is 0 or 1 and B represents (CH<sub>2</sub>)<sub>m</sub>, wherein m is 0 or 1,

R<sup>2</sup> represents H or, when A and B are identical and represents CH<sub>2</sub>, R<sub>2</sub> represents H or F,

Z is phenyl or a heterocyclic group selected from thienyl, furyl, pyrrolyl wherein each Z is optionally substituted by cyano, fluoro, chloro or trifluoromethyl,

W represents phenyl or a heterocyclic group selected from thienyl, furyl, pyridyl,

pyrazinyl, pyridazinyl, pyrrolyl, imidazolyl, thiazolyl, isothiazolyl, thiadiazolyl,

5 pyrimidinyl, pyrazolyl, oxazolyl, isoxazolyl wherein each W is optionally substituted by

one or more of the following: cyano, fluoro, chloro, trifluoromethoxy, difluoromethoxy or

trifluoromethyl, or with one trifluoromethylsulfonyl or one 2,2-difluoro-1,3-dioxolane ring

(fused with two adjacent aromatic carbon atoms in W),

as well as pharmaceutically acceptable salts, thereof.

10

5. A compound according to any of the preceding claims, in which X represents a phenyl group substituted with one or more cyano, fluoro, chloro, trifluoromethoxy, difluoromethoxy or trifluoromethyl, or X represents a diphenylmethyl or a dipyridinomethyl group, optionally substituted at the aryl group(s) by one or more cyano, 15 fluoro, chloro, trifluoromethoxy, difluoromethoxy or trifluoromethyl,

Y is OCH<sub>2</sub> (in which the heteroatom is connected to X),

R<sup>1</sup> is hydrogen,

A represents (CH<sub>2</sub>)<sub>n</sub>, wherein n is 0 or 1 and B represents (CH<sub>2</sub>)<sub>m</sub>, wherein m is 0 or 1,

R<sup>2</sup> represents H or, when A and B are identical and represents CH<sub>2</sub>, R<sub>2</sub> represents H or F,

20 Z is thienyl, furyl or pyrrolyl,

W represents phenyl or a heterocyclic group selected from pyridyl, pyrazinyl, pyridazinyl,

pyrrolyl, imidazolyl, thiazolyl, isothiazolyl, thiadiazolyl, pyrimidinyl, pyrazolyl, oxazolyl,

isoxazolyl wherein each W is optionally substituted by one or more of the following:

cyano, fluoro, chloro, trifluoromethoxy, difluoromethoxy or trifluoromethyl, or with one

25 trifluoromethylsulfonyl or one 2,2-difluoro-1,3-dioxolane ring (fused with two adjacent

aromatic carbon atoms in W),

as well as pharmaceutically acceptable salts thereof.

6. A compound according to any of the preceding claims, in which X represents a phenyl

30 group substituted with one or more cyano, fluoro, chloro, trifluoromethoxy, difluoromethoxy or trifluoromethyl, or X represents a diphenylmethyl group, optionally

substituted at the phenyl group(s) by one or more cyano, fluoro, chloro, trifluoromethoxy, difluoromethoxy or trifluoromethyl,

Y is OCH<sub>2</sub> (in which the heteroatom is connected to X),

R<sup>1</sup> is hydrogen,

- 5 A represents (CH<sub>2</sub>)<sub>n</sub>, wherein n is 0 or 1 and B represents (CH<sub>2</sub>)<sub>m</sub>, wherein m is 0 or 1,  
R<sup>2</sup> represents H or, when A and B are identical and represents CH<sub>2</sub>, R<sub>2</sub> represents H or F,  
Z is 2,5-thienyl (where position 2 is linked to group W),  
W represents phenyl or a heterocyclic group selected from pyridyl, pyrazinyl, pyridazinyl,  
10 pyrrolyl, imidazolyl, thiazolyl, isothiazolyl, thiadiazolyl, pyrimidinyl, pyrazolyl, oxazolyl,  
isoxazolyl wherein each W is optionally substituted by one or more of the following:  
cyano, fluoro, chloro, trifluoromethoxy, difluoromethoxy or trifluoromethyl, or with one  
15 trifluoromethylsulfonyl or one 2,2-difluoro-1,3-dioxolane ring (fused with two adjacent  
aromatic carbon atoms in W),  
as well as pharmaceutically acceptable salts thereof.

15

7. A compound according to any of the preceding claims, in which X represents a phenyl  
group substituted with one or more cyano, fluoro, chloro, trifluoromethoxy,  
difluoromethoxy or trifluoromethyl, or X represents a diphenylmethyl group, optionally  
20 substituted at the phenyl group(s) by one or more cyano, fluoro, chloro, trifluoromethoxy,  
difluoromethoxy or trifluoromethyl,

Y is OCH<sub>2</sub> (in which the heteroatom is connected to X),

R<sup>1</sup> is hydrogen,

- A represents (CH<sub>2</sub>)<sub>n</sub>, wherein n is 0 or 1 and B represents (CH<sub>2</sub>)<sub>m</sub>, wherein m is 0 or 1,  
R<sup>2</sup> represents H or, when A and B are identical and represents CH<sub>2</sub>, R<sub>2</sub> represents H or F,  
25 Z is 2,5-furyl (where position 2 is linked to group W),  
W represents phenyl or a heterocyclic group selected from pyridyl, pyrazinyl, pyridazinyl,  
pyrrolyl, imidazolyl, thiazolyl, isothiazolyl, thiadiazolyl, pyrimidinyl, pyrazolyl, oxazolyl,  
isoxazolyl wherein each W is optionally substituted by one or more of the following:  
cyano, fluoro, chloro, trifluoromethoxy, difluoromethoxy or trifluoromethyl, or with one  
30 trifluoromethylsulfonyl or one 2,2-difluoro-1,3-dioxolane ring (fused with two adjacent  
aromatic carbon atoms in W),  
as well as pharmaceutically acceptable salts thereof.

8. A compound according to any of the preceding claims, in which X represents a phenyl group substituted with one or more cyano, fluoro, chloro, trifluoromethoxy, difluoromethoxy or trifluoromethyl, or X represents a diphenylmethyl group, optionally 5 substituted (at the phenyl group(s)) by one or more cyano, fluoro, chloro, trifluoromethoxy, difluoromethoxy or trifluoromethyl,  
Y is OCH<sub>2</sub> (in which the heteroatom is connected to X),  
R<sup>1</sup> is hydrogen,  
A represents (CH<sub>2</sub>)<sub>n</sub>, wherein n is 0 or 1 and B represents (CH<sub>2</sub>)<sub>m</sub>, wherein m is 0 or 1,  
10 R<sup>2</sup> represents H or, when A and B are identical and represents CH<sub>2</sub>, R<sub>2</sub> represents H or F,  
Z is 1,3-1*H* pyrrolyl (in which the heteroatom is connected to W),  
W represents phenyl or a heterocyclic group selected from pyridyl, pyrazinyl, pyridazinyl, pyrrolyl, imidazolyl, thiazolyl, isothiazolyl, thiadiazolyl, pyrimidinyl, pyrazolyl, oxazolyl, isoxazolyl wherein each W is optionally substituted by one or more of the following:  
15 cyano, fluoro, chloro, trifluoromethoxy, difluoromethoxy or trifluoromethyl, or with one trifluoromethylsulfonyl or one 2,2-difluoro-1,3-dioxolane ring (fused with two adjacent aromatic carbon atoms in W),  
as well as pharmaceutically acceptable salts thereof.
- 20 9. A compound according to any of the preceding claims, in which Z is pyrrolyl.
10. A compound according to any of the preceding claims, in which Z is 1,3-1*H* pyrrolyl  
(in which the heteroatom is connected to W).
- 25 11. A compound according to any of the preceding claims, in which W is phenyl or 2-pyridyl, optionally substituted by one or more of the following: cyano, fluoro, chloro, trifluoromethoxy, difluoromethoxy, trifluoromethyl or trifluoromethylsulfonyl.
- 30 12. A compound according to any of the preceding claims, in which Y is OCH<sub>2</sub>.
13. One or more of the following compounds:  
2-(3-chlorophenoxy)-N-[1-[(1-phenyl-1*H*-pyrrol-3-yl)methyl]piperidin-4-yl}acetamide

- 2-(3-chlorophenoxy)-*N*-[1-{1-[4-(trifluoromethyl)phenyl]-1*H*-pyrrol-3-yl}methyl]piperidin-4-yl]acetamide
- 2-(3-chlorophenoxy)-*N*-(1-{{1-(4-methoxyphenyl)-1*H*-pyrrol-3-yl}methyl}piperidin-4-yl)acetamide
- 5 2-(3-chlorophenoxy)-*N*-(1-{{1-(2-chlorophenyl)-1*H*-pyrrol-3-yl}methyl}piperidin-4-yl)acetamide
- 2-(3-chlorophenoxy)-*N*-[1-{1-[5-(trifluoromethyl)pyridin-2-yl]-1*H*-pyrrol-3-yl}methyl]piperidin-4-yl]acetamide
- 10 2-(3-chlorophenoxy)-*N*-(1-{{1-(3-chlorophenyl)-1*H*-pyrrol-3-yl}methyl}piperidin-4-yl)acetamide
- 2-(3-chlorophenoxy)-*N*-[1-(4-pyridin-2-ylbenzyl)piperidin-4-yl]acetamide
- 2-(3-chlorophenoxy)-*N*-(1-{{5-(4-chlorophenyl)-2-furyl}methyl}piperidin-4-yl)acetamide
- 2-(3-chlorophenoxy)-*N*-[1-{1-[4-(trifluoromethoxy)phenyl]-1*H*-pyrrol-3-yl}methyl]piperidin-4-yl]acetamide
- 15 2-(3-chlorophenoxy)-*N*-{1-[3-(1*H*-pyrrol-1-yl)benzyl]piperidin-4-yl}acetamide
- 2-(3-chlorophenoxy)-*N*-[1-(3-pyridin-2-ylbenzyl)piperidin-4-yl]acetamide
- 2-(3-chlorophenoxy)-*N*-(1-{{5-(2,4-dichlorophenyl)-2-furyl}methyl}piperidin-4-yl)acetamide
- 20 2-(3-chlorophenoxy)-*N*-[1-{{5-[1-methyl-5-(trifluoromethyl)-1*H*-pyrazol-3-yl]-2-thienyl}methyl}piperidin-4-yl]acetamide
- N*-(1-{{1-(4-bromophenyl)-1*H*-pyrrol-3-yl}methyl}piperidin-4-yl)-2-(3-chlorophenoxy)acetamide
- 2-(3-chlorophenoxy)-*N*-methyl-*N*-[1-{1-[4-(trifluoromethyl)phenyl]-1*H*-pyrrol-3-yl}methyl]piperidin-4-yl]acetamide
- 25 2-[{(3-chlorophenyl)thio}-*N*-[1-{1-[4-(trifluoromethyl)phenyl]-1*H*-pyrrol-3-yl}methyl]piperidin-4-yl]acetamide
- 2-(pyridin-3-yloxy)-*N*-[1-{1-[4-(trifluoromethyl)phenyl]-1*H*-pyrrol-3-yl}methyl]piperidin-4-yl]acetamide
- 2-[3-(trifluoromethoxy)phenoxy]-*N*-[1-{1-[4-(trifluoromethyl)phenyl]-1*H*-pyrrol-3-30 yl}methyl]piperidin-4-yl]acetamide

- 2-[3-(trifluoromethoxy)phenoxy]-N-[1-({1-[5-(trifluoromethyl)pyridin-2-yl]-1*H*-pyrrol-3-yl}methyl)piperidin-4-yl]acetamide
- 2-(3-cyanophenoxy)-N-[1-({1-[4-(trifluoromethyl)phenyl]-1*H*-pyrrol-3-yl}methyl)piperidin-4-yl]acetamide
- 5 2-(3-fluorophenoxy)-N-[1-({1-[4-(trifluoromethyl)phenyl]-1*H*-pyrrol-3-yl}methyl)piperidin-4-yl]acetamide
- 2-(3-cyanophenoxy)-N-[1-({5-[1-methyl-5-(trifluoromethyl)-1*H*-pyrazol-3-yl]-2-thienyl}methyl)piperidin-4-yl]acetamide
- 10 2-(2-chlorophenoxy)-N-[1-({1-[4-(trifluoromethyl)phenyl]-1*H*-pyrrol-3-yl}methyl)piperidin-4-yl]acetamide
- 2-(3-chlorophenoxy)-N-[1-({5-[4-(trifluoromethoxy)phenyl]-2-furyl}methyl)piperidin-4-yl]acetamide
- 15 2-(3-chlorophenoxy)-N-(1-{[1-(4-cyanophenyl)-1*H*-pyrrol-3-yl]methyl}piperidin-4-yl)acetamide
- 2-(3-cyanophenoxy)-N-(1-{[5-(2,4-dichlorophenyl)-2-furyl]methyl}piperidin-4-yl)acetamide
- 20 2-(3-cyanophenoxy)-N-[1-({1-[4-(trifluoromethoxy)phenyl]-1*H*-pyrrol-3-yl}methyl)piperidin-4-yl]acetamide
- 2-(3-chlorophenoxy)-N-(1-{[1-(5-chloropyrimidin-2-yl)-1*H*-pyrrol-3-yl]methyl}piperidin-4-yl)acetamide
- 25 3-(3-chlorophenyl)-N-[1-({1-[4-(trifluoromethyl)phenyl]-1*H*-pyrrol-3-yl}methyl)piperidin-4-yl]propanamide  
(2E)-3-(3-chlorophenyl)-N-[1-({1-[4-(trifluoromethyl)phenyl]-1*H*-pyrrol-3-yl}methyl)piperidin-4-yl]acrylamide
- 2-(3,5-difluorophenoxy)-N-[1-({1-[4-(trifluoromethyl)phenyl]-1*H*-pyrrol-3-yl}methyl)piperidin-4-yl]acetamide
- 2-(2,6-diisopropylphenoxy)-N-[1-({1-[4-(trifluoromethyl)phenyl]-1*H*-pyrrol-3-yl}methyl)piperidin-4-yl]acetamide
- 2-(3-isopropylphenoxy)-N-[1-({1-[4-(trifluoromethyl)phenyl]-1*H*-pyrrol-3-yl}methyl)piperidin-4-yl]acetamide
- 30

2-(2-cyanophenoxy)-N-[1-({1-[4-(trifluoromethyl)phenyl]-1*H*-pyrrol-3-yl}methyl)piperidin-4-yl]acetamide

2-(isoquinolin-5-yloxy)-N-[1-({1-[4-(trifluoromethyl)phenyl]-1*H*-pyrrol-3-yl}methyl)piperidin-4-yl]acetamide

5 2-(3,4-difluorophenoxy)-N-[1-({1-[4-(trifluoromethyl)phenyl]-1*H*-pyrrol-3-yl}methyl)piperidin-4-yl]acetamide

2-[(5-chloropyridin-2-yl)oxy]-N-[1-({1-[4-(trifluoromethyl)phenyl]-1*H*-pyrrol-3-yl}methyl)piperidin-4-yl]acetamide

10 2-(3-chlorophenoxy)-N-[1-({1-[6-(trifluoromethyl)pyridin-3-yl]-1*H*-pyrrol-3-yl}methyl)piperidin-4-yl]acetamide

2-(biphenyl-3-yloxy)-N-[1-({1-[4-(trifluoromethyl)phenyl]-1*H*-pyrrol-3-yl}methyl)piperidin-4-yl]acetamide,

2-(4-chlorophenoxy)-2-methyl-N-[1-({1-[4-(trifluoromethyl)phenyl]-1*H*-pyrrol-3-yl}methyl)piperidin-4-yl]propanamide,

15 2-(3-chlorophenoxy)-N-[1-({1-[4-(trifluoromethyl)phenyl]-1*H*-pyrrol-3-yl}methyl)azetidin-3-yl]acetamide

2-(diphenylmethoxy)-N-[1-({1-[4-(trifluoromethyl)phenyl]-1*H*-pyrrol-3-yl}methyl)piperidin-4-yl]acetamide

2-(3-chlorophenoxy)-N-[(3*S*,4*S*)-3-fluoro-1-({1-[4-(trifluoromethyl)phenyl]-1*H*-pyrrol-3-yl}methyl)piperidin-4-yl]acetamide,

2-(3-chlorophenoxy)-N-[(3*R*,4*R*)-3-fluoro-1-({1-[4-(trifluoromethyl)phenyl]-1*H*-pyrrol-3-yl}methyl)piperidin-4-yl]acetamide

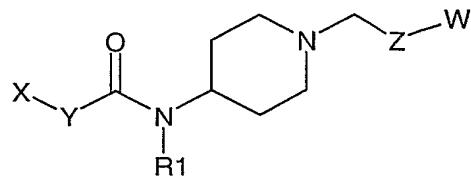
2-(3,4-difluorophenoxy)-N-[1-({1-[4-(trifluoromethyl)phenyl]-1*H*-pyrrol-3-yl}methyl)pyrrolidin-3-yl]acetamide

25 2-(3-chlorophenoxy)-N-{1-[(1-{4-[(trifluoromethyl)sulfonyl]phenyl}-1*H*-pyrrol-3-yl)methyl)piperidin-4-yl}acetamide

2-(3-chlorophenoxy)-N-(1-{[1-(2,2-difluoro-1,3-benzodioxol-5-yl)-1*H*-pyrrol-3-yl}methyl)piperidin-4-yl]acetamide

and pharmaceutically acceptable salts thereof.

## 14. A compound of formula Ia



(Ia)

- 5 wherein X represents a 5-10 membered aryl or a heterocyclic group selected from pyrrolyl, imidazolyl, furyl, thienyl, thiazolyl, isothiazolyl, thiadiazolyl, pyrazolyl, oxazolyl, isoxazolyl, pyridyl, pyrazinyl, pyrimidinyl, pyridazinyl, quinolinyl, isoquinolyl, quinazolyl, indolyl, benzofuranyl, benzo[b]thienyl or benzimidazolyl,  
 wherein each X is optionally substituted by one or more of the following: cyano, halo, a  
 10 C<sub>1-4</sub> alkyl group optionally substituted by one or more fluoro, a C<sub>1-4</sub> alkoxy group  
 optionally substituted by one or more fluoro, a group CONR<sup>a</sup>R<sup>b</sup> in which R<sup>a</sup> and R<sup>b</sup>  
 independently represent a C<sub>1-3</sub> alkyl group, phenyl, phenoxy, 2-pyridyl or 3-pyridyl,  
 wherein the aromatic substituents (i.e. phenyl, phenoxy, 2-pyridyl or 3-pyridyl) may  
 optionally be substituted by fluoro, chloro or cyano,  
 15 Y is OCH<sub>2</sub>, SCH<sub>2</sub> (both in which the heteroatom is connected to X), CH<sub>2</sub>CH<sub>2</sub> or CH=CH,  
 wherein each carbon in Y is optionally substituted by 1 or 2 methyl groups and/or 1 or 2  
 fluoro,  
 R<sup>1</sup> represents H or a C<sub>1-4</sub>alkyl group,  
 Z represents phenyl or a heterocyclic group selected from thienyl, furyl, pyridyl, pyrazinyl,  
 20 pyridazinyl, pyrrolyl, imidazolyl, thiazolyl, isothiazolyl, thiadiazolyl, pyrimidinyl,  
 pyrazolyl, oxazolyl, isoxazolyl wherein each Z is optionally substituted by one or more of  
 the following: cyano, halo, a C<sub>1-4</sub> alkyl group optionally substituted by one or more fluoro,  
 a C<sub>1-4</sub> alkoxy group optionally substituted by one or more fluoro,  
 W represents phenyl or a heterocyclic group selected from thienyl, furyl, pyridyl,  
 25 pyrazinyl, pyridazinyl, pyrrolyl, imidazolyl, thiazolyl, isothiazolyl, thiadiazolyl,  
 pyrimidinyl, pyrazolyl, oxazolyl, isoxazolyl wherein each W is optionally substituted by  
 one or more of the following: cyano, halo, a C<sub>1-4</sub> alkyl group optionally substituted by one or more fluoro,  
 a C<sub>1-4</sub> alkoxy group optionally substituted by one or more fluoro,

as well as tautomers, optical isomers and racemates thereof as well as pharmaceutically acceptable salts thereof,

with the proviso that 2-(4-chlorophenoxy)-N-{1-[4-(1,2,3-thiadiazol-4-yl)benzyl]piperidin-4-yl}acetamide is excluded.

5

15. A compound according to claim 14, in which X represents a phenyl or pyridyl group substituted with one or more cyano, fluoro, chloro, trifluoromethoxy, difluoromethoxy or trifluoromethyl,

Y is OCH<sub>2</sub> or SCH<sub>2</sub> (both in which the heteroatom is connected to X) CH<sub>2</sub>CH<sub>2</sub> or CH=CH,

10 R<sup>1</sup> is hydrogen or methyl,

Z is phenyl or a heterocyclic group selected from thienyl, furyl, pyridyl, pyrrolyl wherein each Z is optionally substituted by cyano, fluoro, chloro or trifluoromethyl,

W represents phenyl or a heterocyclic group selected from thienyl, furyl, pyridyl, pyrazinyl, pyridazinyl, pyrrolyl, imidazolyl, thiazolyl, isothiazolyl, thiadiazolyl, 15 pyrimidinyl, pyrazolyl, oxazolyl, isoxazolyl wherein each W is optionally substituted by one or more of the following: cyano, fluoro, chloro, trifluoromethoxy, difluoromethoxy or trifluoromethyl,

as well as pharmaceutically acceptable salts, thereof.

20 16. A compound according to claim 1 or claim 2, wherein X represents naphthyl or a heteroaryl ring selected from quinolinyl, isoquinolyl, quinazolyl, indolyl, benzofuranyl, benzo[b]thienyl, or benzimidazolyl,

wherein each X is optionally substituted by one or more of the following: cyano, halo, a C<sub>1-4</sub> alkyl group optionally substituted by one or more fluoro, a C<sub>1-4</sub> alkoxy group 25 optionally substituted by one or more fluoro, a group CONR<sup>a</sup>R<sup>b</sup> in which R<sup>a</sup> and R<sup>b</sup> independently represent a C<sub>1-3</sub> alkyl group,

Y is OCH<sub>2</sub> or SCH<sub>2</sub> (both in which the heteroatom is connected to X) CH<sub>2</sub>CH<sub>2</sub> or CH=CH,

R<sup>1</sup> is hydrogen or methyl,

Z is phenyl or a heterocyclic group selected from thienyl, furyl, pyridyl, pyrrolyl wherein 30 each Z is optionally substituted by cyano, fluoro, chloro or trifluoromethyl,

W represents phenyl or a heterocyclic group selected from thienyl, furyl, pyridyl, pyrazinyl, pyridazinyl, pyrrolyl, imidazolyl, thiazolyl, isothiazolyl, thiadiazolyl,

pyrimidinyl, pyrazolyl, oxazolyl, isoxazolyl wherein each W is optionally substituted by one or more of the following: cyano, fluoro, chloro, trifluoromethoxy, difluoromethoxy or trifluoromethyl,  
as well as pharmaceutically acceptable salts, thereof.

5

17. A compound according to any of the preceding claims, wherein X represents phenyl or pyridyl group optionally substituted by one or more halogen and is further substituted by a phenyl, phenoxy, 2-pyridyl or 3-pyridyl group, wherein the substituents (*i.e.* phenyl, phenoxy, 2-pyridyl or 3-pyridyl) may optionally be further substituted by one or more  
10 fluoro, chloro or cyano,

Y is OCH<sub>2</sub> or SCH<sub>2</sub> (both in which the heteroatom is connected to X) CH<sub>2</sub>CH<sub>2</sub> or CH=CH,  
R<sup>1</sup> is hydrogen or methyl,

Z is phenyl or a heterocyclic group selected from thienyl, furyl, pyridyl, pyrrolyl wherein each Z is optionally substituted by cyano, fluoro, chloro or trifluoromethyl,

15 W represents phenyl or a heterocyclic group selected from thienyl, furyl, pyridyl, pyrazinyl, pyridazinyl, pyrrolyl, imidazolyl, thiazolyl, isothiazolyl, thiadiazolyl, pyrimidinyl, pyrazolyl, oxazolyl, isoxazolyl wherein each W is optionally substituted by one or more of the following: cyano, fluoro, chloro, trifluoromethoxy, difluoromethoxy or trifluoromethyl,

20 as well as pharmaceutically acceptable salts, thereof.

18. A compound according to any of the preceding claims, in which X represents a phenyl group substituted with one or more cyano, fluoro, chloro, trifluoromethoxy, difluoromethoxy or trifluoromethyl,

25 Y is OCH<sub>2</sub> (in which the heteroatom is connected to X),

R<sup>1</sup> is hydrogen,

Z is thienyl, furyl or pyrrolyl,

W represents phenyl or a heterocyclic group selected from pyridyl, pyrazinyl, pyridazinyl, pyrrolyl, imidazolyl, thiazolyl, isothiazolyl, thiadiazolyl, pyrimidinyl, pyrazolyl, oxazolyl,

30 isoxazolyl wherein each W is optionally substituted by one or more of the following: cyano, fluoro, chloro, trifluoromethoxy, difluoromethoxy or trifluoromethyl,

as well as pharmaceutically acceptable salts thereof.

19. A compound according to any of the preceding claims, in which X represents a phenyl group substituted with one or more cyano, fluoro, chloro, trifluoromethoxy, difluoromethoxy or trifluoromethyl,

5 Y is OCH<sub>2</sub> (in which the heteroatom is connected to X),

R<sup>1</sup> is hydrogen,

Z is 2,5-thienyl (where position 2 is linked to group W),

W represents phenyl or a heterocyclic group selected from pyridyl, pyrazinyl, pyridazinyl, pyrrolyl, imidazolyl, thiazolyl, iso-thiazolyl, thiadiazolyl, pyrimidinyl, pyrazolyl, oxazolyl,

10 isoxazolyl wherein each W is optionally substituted by one or more of the following: cyano, fluoro, chloro, trifluoromethoxy, difluoromethoxy or trifluoromethyl,

as well as pharmaceutically acceptable salts thereof.

20. A compound according to any of the preceding claims, in which X represents a phenyl

15 group substituted with one or more cyano, fluoro, chloro, trifluoromethoxy, difluoromethoxy or trifluoromethyl,

Y is OCH<sub>2</sub> (in which the heteroatom is connected to X),

R<sup>1</sup> is hydrogen,

Z is 2,5-furyl (where position 2 is linked to group W),

20 W represents phenyl or a heterocyclic group selected from pyridyl, pyrazinyl, pyridazinyl, pyrrolyl, imidazolyl, thiazolyl, iso-thiazolyl, thiadiazolyl, pyrimidinyl, pyrazolyl, oxazolyl,

isoxazolyl wherein each W is optionally substituted by one or more of the following: cyano, fluoro, chloro, trifluoromethoxy, difluoromethoxy or trifluoromethyl,

as well as pharmaceutically acceptable salts thereof.

25

21. A compound according to any of the preceding claims, in which X represents a phenyl group substituted with one or more cyano, fluoro, chloro, trifluoromethoxy, difluoromethoxy or trifluoromethyl,

Y is OCH<sub>2</sub> (in which the heteroatom is connected to X),

30 R<sup>1</sup> is hydrogen,

Z is 1,3-1H pyrrolyl (in which the heteroatom is connected to W),

W represents phenyl or a heterocyclic group selected from pyridyl, pyrazinyl, pyridazinyl, pyrrolyl, imidazolyl, thiazolyl, isothiazolyl, thiadiazolyl, pyrimidinyl, pyrazolyl, oxazolyl, isoxazolyl wherein each W is optionally substituted by one or more of the following: cyano, fluoro, chloro, trifluoromethoxy, difluoromethoxy or trifluoromethyl,

5 as well as pharmaceutically acceptable salts thereof.

22. A compound according to any of the preceding claims, in which Z is pyrrolyl.

10 23. A compound according to any of the preceding claims, in which Z is 1,3-1*H* pyrrolyl  
(in which the heteroatom is connected to W).

24. A compound according to any of the preceding claims, in which W is phenyl or 2-pyridyl, optionally substituted by one or more of the following: cyano, fluoro, chloro, trifluoromethoxy, difluoromethoxy or trifluoromethyl.

15 25. A compound according to any of the preceding claims, in which Y is OCH<sub>2</sub>.

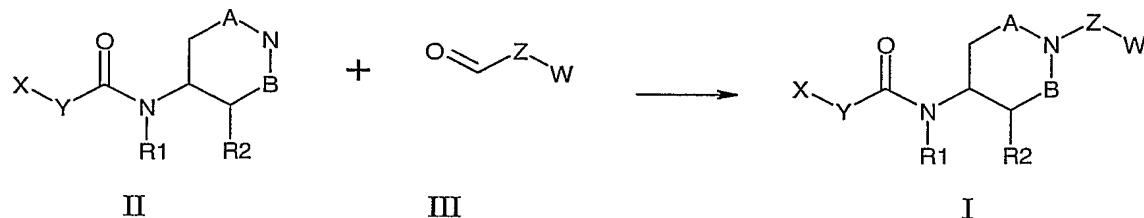
26. A compound of formula I as claimed in any one of claims 1 to 25 for use as a medicament.

20 27. A pharmaceutical formulation comprising a compound of formula I or formula Ia, as defined in any one of claims 1 to 25 and a pharmaceutically acceptable adjuvant, diluent or carrier.

25 28. Use of a compound of formula I or formula Ia as defined in any one of claims 1 to 25 in the preparation of a medicament for the treatment or prophylaxis of conditions associated with obesity.

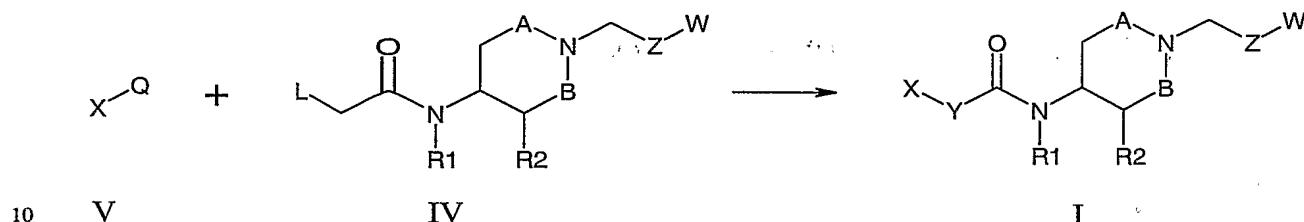
30 29. A compound as defined in any one of claims 1 to 25 including for use in the treatment of obesity.

30. A process for the preparation of compounds of formula I or formula Ia comprising reacting a compound of formula II with a compound of formula III



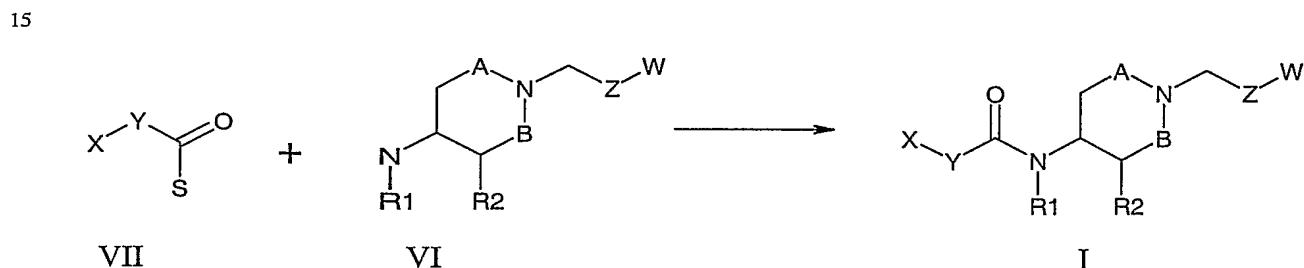
5 in which X, Y, Z, W, A, B, R<sup>1</sup> and R<sup>2</sup> are as previously defined,

31. A process for the preparation of compounds of formula I or formula Ia comprising reacting a compound of formula IV with a compound of formula V



10 in which X, Q, L, Y, Z, W, A, B, R<sup>1</sup> and R<sup>2</sup> are as previously defined,

32. A process for the preparation of compounds of formula I or formula Ia comprising reacting a compound of formula VI with a compound of formula VII



15 in which X, Y, S, Z, W, A, B, R<sup>1</sup> and R<sup>2</sup> are as previously defined,

20 33. The following compounds of formulae II, III, IV and VI, including salts thereof, which are useful as synthesis intermediates:

2-(3-chlorophenoxy)-N-piperidin-4-ylacetamide

2-(3-cyanophenoxy)-N-piperidin-4-ylacetamide

2-(3-fluorophenoxy)-N-piperidin-4-ylacetamide

2-(2-chlorophenoxy)-*N*-piperidin-4-ylacetamide

*N*-piperidin-4-yl-2-(pyridin-3-yloxy)acetamide

*N*-piperidin-4-yl-2-[3-(trifluoromethoxy)phenoxy]acetamide

2-phenoxy-*N*-piperidin-4-ylacetamide

5 2-(3-chlorophenoxy)-*N*-methyl-*N*-piperidin-4-ylacetamide

2-[(3-chlorophenyl)thio]-*N*-piperidin-4-ylacetamide

1-[5-(trifluoromethyl)pyridin-2-yl]-1*H*-pyrrole-3-carbaldehyde

1-(5-chloropyrimidin-2-yl)-1*H*-pyrrole-3-carbaldehyde

4-(3-formyl-1*H*-pyrrol-1-yl)benzonitrile

10 2-chloro-*N*-[1-{1-[4-(trifluoromethyl)phenyl]-1*H*-pyrrol-3-yl}methyl]piperidin-4-yl]acetamide

1-(1-[4-(trifluoromethyl)phenyl]-1*H*-pyrrol-3-yl)methyl)piperidin-4-amine  
dihydrochloride

*tert*-butyl[1-{1-[4-(trifluoromethyl)phenyl]-1*H*-pyrrol-3-yl}methyl]piperidin-4-yl]carbamate

1-(6-trifluoromethyl-pyridin-3-yl)-1*H*-pyrrole-3-carbaldehyde

2-(3,4-difluorophenoxy)-*N*-pyrrolidin-3-ylacetamide

1-(2,2-difluoro-benzo[1,3]dioxol-5-yl)-1*H*-pyrrole-3-carbaldehyde

1-(4-Trifluoromethanesulfonyl-phenyl)-1*H*-pyrrole-3-carbaldehyde.

20

34. A method of treating obesity, psychiatric disorders, anxiety, anxi-depressive disorders, depression, bipolar disorder, ADHD, cognitive disorders, memory disorders, schizophrenia, epilepsy, and related conditions, and neurological disorders and pain related disorders, comprising administering a pharmacologically effective amount of a compound as claimed in any one of claims 1 to 25 to a patient in need thereof.

25

35. A method of treating obesity, type II diabetes, metabolic syndrome and prevention of type II diabetes comprising administering a pharmacologically effective amount of a compound as claimed in any one of claims 1 to 25 to a patient in need thereof.

30